

## CLAIMS

### WHAT IS CLAIMED IS:

1. A fluorine-containing ethylene copolymer composition comprising:  
the product of the reaction between an ethylene/glycidyl  
5 (meth)acrylate copolymer and a fluorine-containing carboxylic acid.
2. A fluorine-containing ethylene copolymer composition comprising:  
the product of the reaction between an ethylene/glycidyl  
(meth)acrylate copolymer and a perfluorinated carboxylic acid,  
characterized in that the copolymer absorbs light in the region of  
10 from about  $1750\text{ cm}^{-1}$  to about  $1800\text{ cm}^{-1}$  of the infra red absorption spectrum.
3. A blend comprising at least two thermoplastic materials wherein at  
least one is a fluorine-containing ethylene copolymer composition  
comprising the product of the reaction between an ethylene/glycidyl  
15 (meth)acrylate copolymer and a fluorine-containing carboxylic acid.
4. A blend comprising at least two thermoplastic materials wherein at  
least one is a fluorine-containing ethylene copolymer composition  
comprising the product of the reaction between an ethylene/glycidyl  
(meth)acrylate copolymer and a fluorine-containing carboxylic acid,  
20 characterized in that the copolymer absorbs light in the region of  
from about  $1750\text{ cm}^{-1}$  to about  $1800\text{ cm}^{-1}$  of the infra red absorption spectrum.
5. An article having a surface with a total surface energy of less than  
25 dyne/cm comprising: a fluorine-containing ethylene copolymer  
composition comprising the product of the reaction between an  
ethylene/glycidyl (meth)acrylate copolymer and a fluorine-  
containing carboxylic acid.
6. An article having a surface with a total surface energy of less than  
25 dyne/cm comprising: a fluorine-containing ethylene copolymer  
30 composition comprising the product of the reaction between an  
ethylene/glycidyl (meth)acrylate copolymer and a fluorine-  
containing carboxylic acid, characterized in that the copolymer  
absorbs light in the region of from about  $1750\text{ cm}^{-1}$  to about  $1800\text{ cm}^{-1}$  of the infra red absorption spectrum.
- 35 7. A stain-resistant fiber comprising a fluorine-containing ethylene  
copolymer composition comprising the product of the reaction

between an ethylene/glycidyl (meth)acrylate copolymer and a fluorine-containing carboxylic acid.

8. A stain-resistant fiber comprising a fluorine-containing ethylene copolymer composition comprising the product of the reaction between an ethylene/glycidyl (meth)acrylate copolymer and a fluorine-containing carboxylic acid, characterized in that the copolymer absorbs light in the region of from about  $1750\text{ cm}^{-1}$  to about  $1800\text{ cm}^{-1}$  of the infra red absorption spectrum.
9. An article formed by injection molding or by extrusion comprising a fluorine-containing ethylene copolymer composition comprising the product of the reaction between an ethylene/glycidyl (meth)acrylate copolymer and a fluorine-containing carboxylic acid.
10. An article formed by injection molding or by extrusion comprising a fluorine-containing ethylene copolymer composition comprising the product of the reaction between an ethylene/glycidyl (meth)acrylate copolymer and a fluorine-containing carboxylic acid, characterized in that the copolymer absorbs light in the region of from about  $1750\text{ cm}^{-1}$  to about  $1800\text{ cm}^{-1}$  of the infra red absorption spectrum.
11. A mold release additive comprising a fluorine-containing ethylene copolymer composition comprising the product of the reaction between an ethylene/glycidyl (meth)acrylate copolymer and a fluorine-containing carboxylic acid.
12. A mold release additive comprising a fluorine-containing ethylene copolymer composition comprising the product of the reaction between an ethylene/glycidyl (meth)acrylate copolymer and a fluorine-containing carboxylic acid, characterized in that the copolymer absorbs light in the region of from about  $1750\text{ cm}^{-1}$  to about  $1800\text{ cm}^{-1}$  of the infra red absorption spectrum.